IN THE UNITED STATES DESIGNATED/ELECTED OFFICE

International Application No. : PCT/EP2005/000909

International Filing Date : 31 January 2005 (31.01.2005)

Priority Date(s) Claimed : 24 February 2004 (24.02.2004)

Applicant(s) (DO/EO/US) : Matthew FRANCIS, et al.

Title: LIQUID CRYSTAL COMPOSITION FOR BISTABLE LIQUID CRYSTAL

DEVICES

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

Timing and Fees

\boxtimes		Inder 37 C.F.R. § 1.97(b), no fee or statement is required for filing this information is closure statement is filed:						
		within three months of the filing date of a national application other than a CPA under § 1.53(d);						
	\boxtimes	within three months of the actual filing date of the national phase of a PCT application; OR						
		before the mailing of a first substantive office action (including after filing of an RCE).						
		37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods ed in 37 C.F.R. § 1.97(b), but before the mailing date of:						
		a final rejection under 37 C.F.R. 1.113; termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); OR a notice of allowance under 37 C.F.R. § 1.311; and						

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		is acco	ompanied by:
			the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR
			a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p).
			R. § 1.97(d), this information disclosure statement is filed after the mailing lowing actions which have not been withdrawn:
		a final	action under 37 C.F.R. § 1.113;
		termin	nation of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2);
		OR a r	notice of allowance under 37 C.F.R. § 1.311;
	AND	is filed	on or before payment of the issue fee; AND is accompanied by:
			tement as specified in 37 C.F.R. § 1.97(e) as set forth below, and the fee of 00 under 37 C.F.R. § 1.17(p).
Statem	ents U	nder 37	C.F.R. 1.97(e)
			Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or
			No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned attorney after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing date of the information disclosure statement.
Cited 1	Materia	ıls	
		ancest	es of materials listed but not attached were cited in benefit (35 U.S.C. § 120) tor application Serial No, on Form 892 by the Examiner and/or Form by the applicant; see 37 C.F.R. § 1.98(d).
	\boxtimes	-	es of materials listed but not attached were cited in an international search dated <u>June 24, 2005</u> .
		Not re	equired by 37 CFR § 1.98.
		Copie	es of the materials listed are attached (except for the foregoing).
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Non-English	Language References
\boxtimes	An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).
	A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:
	 X = document of particular relevance when it is taken alone Y = document of particular relevance when it is combined with another such document A = document defining the general state of the art
	O = non-written disclosure P = intercalated document
	T = document cited to understand the theory or principle underlying the invention
	E = patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date
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Other Inform	nation
Payment of	Fees Due (If Any):
A ch	eck for \$ covering the fee identified above is attached.
Plea	se charge to Deposit Account No. 13-3402 \$ for the fee identified above.

10/590353 IAP12 Rec'd PCT/PT023 AUG 2006

The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,

Anthony J. Zelano, Reg. No. 27,969 Attorney/Agent for Applicants

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Attorney Docket No.: MERCK-3221

Date: August 23, 2006

AJZ:ssr

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Substitute for form 1449A/PTO Complete if Known USNP of PCT/EP2005/000909 **Application Number** INFORMATION DISCLOSURE Filing Date 31 January 2005 (31.01.2005) STATEMENT BY APPLICANT First Named Inventor Matthew FRANCIS, et al. Group Art Unit unknown (use as many sheets as necessary) **Examiner Name** unknown MERCK-3221 Sheet of Attorney Docket Number

		U.S. Patent Docur	nent		
Examiner Initials *	Cite No.¹	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	001	6,599,589	B1	IWAMATSU ET AL.	07-29-2003
	002	6,287,647	B1	KOBAYASHI ET AL.	09-11-2001
	003	2004/076769	A1	NAKATA ET AL.	04-22-2004
	004	2003/077405	A1	MIYAZAWA, ET AL.	04-24-2003
	005	5,458,804	Α	YAMADA, ET AL.	10-17-1995
				•	

	FOREIGN PATENT DOCUMENTS									
	Cite No.1	Foreign Patent Document				Date of Publication of	Pages, Columns, Lines, Where Relevant			
Examiner Initials*		Office ³	Number ⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	T ⁶		
	006	JP	09 217062	Α	CHISSO CORP	08-19-1997				
	007	JP	2000 336360	Α	KYOCERA CORP	12-05-2000				
	008	JP	2003 147362	1 A	DAINIPPON INK & CHEM	05-21-2003				
	009	EP	1 245 660	Α	CHISSO CORP, E T AL.	10-02-2002		004		
	010	EP	0 571 955	1 A	CANON KABUSHIKI KAISHA	12-01-1993		005		
	011	wo	2004/053020	Α	MERCK PATENT GMBH	06-24-2004				
	012	wo	2004/053021	Α	MERCK PATENT GMBH	06-24-2004				
	013	wo	2004/099343	Α	MERCK PATENT GMBH	11-18-2004				

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WiPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. Number refers to English language corresponding family member.

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				Application Number	USNP of PCT/EP2005/000909	
INFOR	MATIO	N DISCL	.OSURE	Filing Date	31 January 2005 (31.01.2005)	
STATE	MENT	BY APP	LICANT	First Named Inventor	Matthew FRANCIS, et al.	
				Group Art Unit	unknown	
(us	e as many s	sheets as ned	essary)	Examiner Name	unknown	
Sheet	2	of	2	Attorney Docket Number	MERCK-3221	

NON PATENT LITERATURE DOCUMENTS							
Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2					
014	DATABASE WPI; SECTION CH, WEEK 199743, DERWENT PUBLICATIONS LTD., LONDON, GB; CLASS E19, AN 1997-466326; XP002330805						
015	DATABASE WPI; SECTION CH, WEEK 200111; DERWENT PUBLICATIONS LTD., LONDON, GB; CLASS L03, AN 2001-098003; XP002330806						
016	PATENT ABSTRACTS OF JAPAN; VOL. 2003, NO. 09, 09-03-2003						
017	GOTO ET AL: "FLUORINATED LIQUID CRYSTALS FOR ACTIVE MATRIX DISPLAYS" MOLECULAR CRYSTALS AND LIQUID CRYSTALS, GORDON AND BREACH, OOLONDON, GB, VOL. 209, 1991, PAGES 1-7, XP009033843; ISSN: 0026-8941						
018	JONES ET AL: "P-26.3: LOW VOLTAGE ZENITHAL BISTABLE DEVICES WITH WIDE OPERATING WINDOWS" 2003 SID INTERNATIONAL SYMPOSIUM DIGEST OF TECHNIACL PAPERS, VOL. XXXIV, 2003, PAGES 954-958, XP007008277						
019	JONES ET AL: "NOVEL BISTABLE LIQUID CRYSTAL DISPLAYS BASED ON GRATING ALIGNMENT: PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, US, VOL. 3955, 01-27-2000, PAGES 84-93, XP008003419; ISSN: 0277-786X						
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	014 015 016 017	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. DATABASE WPI; SECTION CH, WEEK 199743, DERWENT PUBLICATIONS LTD., LONDON, GB; CLASS E19, AN 1997-466326; XP002330805 DATABASE WPI; SECTION CH, WEEK 200111; DERWENT PUBLICATIONS LTD., LONDON, GB; CLASS L03, AN 2001-098003; XP002330806 O16 PATENT ABSTRACTS OF JAPAN; VOL. 2003, NO. 09, 09-03-2003 GOTO ET AL: "FLUORINATED LIQUID CRYSTALS FOR ACTIVE MATRIX DISPLAYS" MOLECULAR CRYSTALS AND LIQUID CRYSTALS, GORDON AND BREACH, OOLONDON, GB, VOL. 209, 1991, PAGES 1-7, XP009033843; ISSN: 0026-8941 JONES ET AL: "P-26.3: LOW VOLTAGE ZENITHAL BISTABLE DEVICES WITH WIDE OPERATING WINDOWS" 2003 SID INTERNATIONAL SYMPOSIUM DIGEST OF TECHNIACL PAPERS, VOL. XXXIV, 2003, PAGES 954-958, XP007008277 JONES ET AL: "NOVEL BISTABLE LIQUID CRYSTAL DISPLAYS BASED ON GRATING ALIGNMENT: PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, US, VOL. 3955,					

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